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PSYCHOLOGICAL WELL BEING AND SELF CARE PRACTICES OF PATIENT WITH HYPERTENSION

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ABSTRACT

This study identified the types of self-care practices that hypertensive patient in Malaysia adhered most, determined their psychological and social well being and examined the association between self-care practices and psychological. This study used cross-sectional and was conducted in Kuala Lumpur Hospital (HKL) between September 2012 to June 2013, engaging 193 respondents. Most hypertensive showed the symptoms of depression, 63.21% (n=122) but were having moderately high social support with total mean scores of emotional support, tangible support, affectionate support, and positive social interaction were 3.73, 3.98, 3.96 and 3.54 respectively. There was no significant relationship between psychological with adherence to physical activity and weight management, p=0.359 and p=0.358. However, the presence of depression was affecting the medication adherence and adherence to low salt diet with p=0.042 and p=0.001 respectively.

It is concluded that the awareness related to hypertension self care practices was still low even though with moderately high social support.

Keywords: Hypertension, Self-care practices, psychological, social support, Malaysia

INTRODUCTION

Besides being a leading cause of cardiovascular disease, hypertension is a common health problem among people all around the world (Zhao et al., 2012). There are many demographic factors that may causes to hypertension, such as because of economic expansion, and this condition may increase availability and variation of food (Perkovic et al., 2007). The effect of hypertension is well-known among Asian, however, the awareness, treatment and control of hypertension is remain at lower rate (Hong, 2009). National Heart, Lung and Blood Institute (NHLBI) have organized the National High Blood Pressure Education Program (NHBPEP) Coordinating Committee for more than 30 years stated that its vital role is to grow up the realization, treatment, precaution and control of hypertension (Chobanian et al., 2003). According to Zhao et al., (2012), hypertension will be reduced if effective measures such as dietary and lifestyle modification, pharmacologic therapy and population-based health education are well-practice among population.

MATERIALS AND METHOD

Design

This study was conducted in Kuala Lumpur Hospital (KHL) from September 2012 to June 2013. The participants who were eligible to participate in this study were those who are diagnosed with hypertension aged 25 years and above in the selected government hospital, understand English language and willingly to participated in the study.

Questionnaire

This section addressed instrumentation development, validity, and reliability. The questionnaire was adapted from Findlow & Seymour (2011), Sherbourne & Stewart (1991) and Randloff (1997). Part A of the instrument measured the patient's demographic data and individual characteristic information about the study sample. Part B and part C of the instruments measure the psychological and social well being of the patient. Part D was consisted of 4 subscales of self-care practices to identify adherence of hypertension self-care practices. English language had been selected for this questionnaire. A pilot study was initially performed to ensure the validity and reliability of the instruments.

Instrument Part A:

The first part of the instrument was a demographic form developed from relevant literature regarding the factors associated of affecting adherence to hypertension self-care practices. The demographic information requested included individual characteristic items such as age, gender and marital status.

MOS Social Support Survey
Instrument Part B:
Instrument part B consisted of 18 items of Likert scale regarding social support and divided into 4 subscales which are emotional/informational support, tangible support, affectionate support and positive social interaction. This questionnaire focused on evaluating social support received by the patient. Each statement asked the patient to indicate the frequency of support obtained on a scale ranging from "none of the time" with a value of "1"to "all of the time" with a value of "5". To facilitate the interpretation of the response to the items in this scale, the researcher used a mean score ranging from 0 to 4 in which higher score indicates high support received. The score were validated by Randloff (1997).

CES-Depression Scale
Instrument Part C:
The likert-type instrument consists of 20 questions regarding depression. This questionnaire focused on evaluating the presence or severity of depression by asked the patient to describe how often they felt for each of the statement with scale ranging from 0=rarely or none of the time to 3=most or all of the time. The range of score was from 0 to 60 and was obtained by calculating the total score of the items. The score of 24 and above indicate severe depression. The score were validated by Sherbourne & Stewart (1991).

Hypertension self-care activity level effects (H-scale)
Instrument Part D:
Instrument part D consisted of likert type scale and scoring scale. This questionnaire focused on evaluating the participant's adherence to self-care practices and consisted of 27 questions that were divided into 4 subscales which are medication usage (3 questions), diet (12 questions) and physical activity (2 questions) that ranges from 0 to 7. Each statement asked the participants to circle the number of days the activities stated in the questionnaire was performed during the past 7 days (scoring scale). Weight management (10 questions) was range from 0 to 5 and asked the participant to indicate the level of agreement or disagreement on a scale ranging from "strongly disagree" with a value "1" to "strongly agree" with a value of "5" (Likert type scale). The instrument was validated through a review by a panel of experts consisting of experienced professional researchers (Findlow & Seymour, 2011).

RESULTS

Types of self-care practices that hypertensive patient adhere most
Participating hypertensive patient were provided four subscales of questions related to self-care practices to identify the types of self-care practices the hypertensive patient adhere most. Majority of the patient were adhere to medication, 78.23% (n=151), followed by adherence to physical activity, 19.68% (n=38), low salt diet, 12.95% (n=25) and weight management, 8.8% (n=17) with mean± standard deviation (SD) of each subscales were 1.88± 0.451, 1.20± 0.399, 1.13± 0.337 and 1.09± 0.284 respectively (see table I).

Psychological and social well being among hypertensive patient
Assessing of psychological was divided into 4 levels which are not-depressed, mild-depression, moderate depression and severe depression. Refer to the table (see table II), 36.79% (n=71) of hypertensive patient were diagnosed as not-depressed followed by mild depression, 34.72% (n=67), moderate depression, 18.13% (n=35) and severe depression, 10.36% (n=20). However, since mild depression, moderate depression and severe depression were categorized as presence of depression, most of the hypertensive patient involved in this study were having psychological problems, 63.21% (n=122). The percentages of not-depressed patient only 36.79% (n=71). Hypertensive patient were assessed for social support. Social support was divided into 4 subscales which are emotional support, tangible support, affectionate support and positive social interaction. The researchers were using mean and standard deviation to determine the social support among hypertensive patient. High mean score indicating high social support. Based on the result shown in table III (see table III), hypertensive patient mostly having moderately high social support with mean between 3.54 and 3.98 for each subscales. However, the highest support received by hypertensive patient was tangible support with mean± SD, (3.98± 0.90) followed by affectionate support (3.96± 0.95) and emotional support (3.73± 1.01). Positive social interaction showed the lowest score if compared to other subscales with mean± SD, (3.54± 1.09.

Table I: Distribution, frequency and percentages of adherence to self-care practices

	N (%)	Mean	Standard deviation (SD)
Adherence to medication		1.88	0.451
Adhere	151 (78.23)		
Non-adhere	33 (17.09)		
Non-prescribed with pills	9 (4.66)		
Adherence to low salt diet		1.13	0.337
Adhere	25 (12.95)		
Non-adhere	168 (87.04)		
Adherence to Physical Activity		1.20	0.399
Adhere	38 (19.68)		
Non-adhere	155 (80.31)		
Adherence to Weight Management		1.09	0.284
Adhere	17 (8.800)		
Non-adhere	176 (91.19)		

Table II: The frequency and percentages of level of depression

Level of depression	N (%)
Not-depressed	71 (36.79)
Mild depression	67 (34.72)
Moderate depression	35 (18.13)
Severe depression	20 (10.36)

Table III: The Mean and Standard Deviation of Overall Support Index and each subscales.

Social	Mean	Standard deviation (SD)
Emotional support	3.73	1.01
Tangible support	3.98	0.90
Affectionate support	3.96	0.95
Positive social interaction		
Overall support index	3.54	1.09
0-100 scale scores		
	3.78	0.87
	69.56	22.20

Association between self-care practices with psychological

Comparison was made between psychological and adherence to self-care practices. Each of the subscales was compared differently to psychological factor. Chi Square and fisher exact test were used to examine the association between self-care practices with psychological. Chi square was used to examine the association between psychological with adherence to physical activity while fisher exact was used to examine the association between psychological and adherence to medication, diet and weight management. fisher exact used when the result from pearson chi square showed expected count less than 5 was more than 20%. Result (see table IV) showed there were no significant relationship between psychological with adherence to physical activity and adherence to weight management with (x^2= 3.220, p=0.359) and (x^2= 0.846, p=0.358) respectively. In the other hand, the researcher found that there were significant association between psychological with medication's adherence (x^2= 4.153, p=0.042 and adherence to low salt diet, (x^2= 18.990, p=0.001).

Table IV: The relationship between psychological and adherence to self-care practices

	Adhere N (%)	Non-adhere N (%)	X^2 statistic (df)	P-value
Medication				
Not-depressed	64 (33.2)	7 (3.6)	4.153	0.042
Depressed	96 (49.7)	26 (13.5)		
Low salt diet				
Not- depressed	19 (9.8)	52 (26.9)	18.99	0.001
Depressed	6 (3.1)	116 (60.1)		
Physical Activity				
Not-depressed	10 (5.2)	61 (31.6)	3.220	0.359
Mild	4 (7.3)	53 (27.5)		
Moderate	10 (5.2)	25 (13.0)		
Severe	4 (2.1)	16 (8.3)		
Weight management				
Not-depressed	8 (4.1)	63 (32.6)	0.846	0.358
Depressed	9 (4.7)	113 (58.5)		

DISCUSSION

Types of self-care practices that hypertensive patient adhere most

Based on the result obtained in this study, the self-care practices among hypertensive patient were focused more on medical regimen (medication adherence) compared to other subscales (low salt diet, physical activity and weight management). There were many factors that affect the respondent's adherence toward medication. People who were knowledgeable about medical regimen, get better social support from family members, and also positive coping attitude were more prone to adhere with medication as prescribe by physician (Morisky et al., 2008). The non-adherence towards low salt diet, physical activity and weight management may relate to various factors. Based on literature, the main causes of non-adherence to diet was because of self reluctant to follow healthy diet, unable to go through with diet regimen which is different from the other family members and also frequent amount of social gathering (Serour et al, 2007). Meanwhile, people were tends to not-adhere toward physical activity because of demographic factor, psychological factor, behavioural factor, sociocultural or environmental factor and because of physical activity itself. (Mathieu et al., 2009), in their study explained that in Westernized society, the main cause of death was due to obesity related disorder like hypertension, diabetes mellitus and atherogenic dyslipidemia.

Psychological and social well being among hypertensive patient

This study shown that mostly respondents were had psychological problems with majority mild depression. (Magomedova and Damadaeva, 2012) in their study also found about half of their respondents were having depression with the average scale score of CES-D was 21.48 indicating most respondents were experienced mild degree of depression. After adjustments done to other risk factors of hypertension including age, sex and race, a study found that respondents were high risk for the incidence of hypertension if the (CES-D) Depression score was equal or higher than 16 (Davidson et al., 2000; Wu et al., 2010). However, the researcher in this study suggested score of 10 and above for the presence of depression. Most of the respondents were having moderately high social support indicating that the presence or absence social support was not related with the incidence of hypertension. (Strogatz and James, 1986) concluded that low emotional support was not associated with hypertension. Hypertension also does not relate with lack or low social support at workplace (Radi et al., 2011).

Association between self-care practices with psychological

It is reported that there is no different between psychological and adherence to both physical activity and weight management but significant association were found between psychological and adherence to medication and low salt diet. The previous study done showed the different result, where there was relationship between emotional well-being with physical activity and weight management (Trivedi et al., 2008). There were many benefits of the physical activity as level of physical activity increased, the incidence of mortality rate of chronic disease will be decreased (Hakim et al., 1998). Although the benefits of physical activity are well reported, the evidence to support the association between physical activity and psychological well-being is low (Schully et al., 1998). Even the depression is not well related with the weight management adherence, it might be related with internal factors (Stamler et al., 1987). In this study, it showed that there was a difference between psychological and medication's adherence.

Majority depressed respondents were not-adhere to medication regimen compare to respondents that not depressed. Therefore, there was a significant association between psychological and medication adherence in this study. The result finding was same with study done by (DiMatteo et al., 2000) in which there was significant relationship between depression and noncompliance to medication. It is also reported that there is difference between psychological and adherence towards low salt diet. This study was supported by (Trivedi et al., 2008) among White participants and non-White participants showed the same result, there is association between emotional well-being with adherence to treatment among hypertensive patients.

CONCLUSION

In summary, hypertensive patients were not relatively shown adherence towards hypertension self-care practices even though with the presence of moderately high social support. Majority of hypertensive patient were found of having psychological problem and the presence of depression affecting medication adherence and adherence to low salt diet. A further study related to other factors that may affect adherence towards self-care practices is vital to increase awareness regarding the importance of self-care practices among patient with hypertension.

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